Michigan Department of Consumer & Industry Services
Bureau of Construction Codes

BULLETIN

Volume 4, Issue 4 August 1999

DIRECTOR'S COLUMN

Henry L. Green

In September of this year, the International Code Council will hold final hearings on the development of the 2000 edition of the International Building Code. This will be the first publication of this code. However, significant work has gone into the development of this code and it is a compilation of the current editions of the National Building Code, the Uniform Building Code and the Standard Building Code, with refinements that reflect the latest in technology and a consensus understanding of these codes.

Michigan is embarking on adoption of the International Building Code (IBC) with a focus on implementation in 2000. A Building Code Ad Hoc Committee will be meeting later this year to begin the review process. As with our other codes it is our goal to adopt the 2000 edition of the code in 2000.

A long held objective of the Bureau and the State Construction Code Commission is to complete the adoption of the codes within a reasonable period of time after the initial publication of the code. The tentative publication schedule for the 2000 IBC calls for the availability of the code in early 2000. The Bureau of Construction Codes will be reviewing issues currently contained in the Part 4 Building Code Rules to determine if we can remove current rules and rely

(Continued on Page 2)

Recruitment of State Inspectors

Over the past couple of years the employment lists for construction code inspectors have become deficient in several areas. Currently, there is only 1 opening within the bureau's Elevator Division; however, due to retirements and staff changes there may be other vacancies within the next year. The bureau is therefore attempting recruitment efforts for a variety of positions. The classification of inspectors includes, Building Code Inspector E11, Boiler Inspector E11, Electrical Inspector E11, Elevator Inspector E11, Mechanical Inspector E11, Plumbing Inspector E11. The majority of these positions conduct inspections within a geographical location in the state. Others perform plan reviews within the bureau's Okemos office. The salary range for these positions is \$33,679.44 - \$43,994.16 and includes a full range of benefits.

If you are interested in getting your name on an employment register, you must complete a civil service application. There is no written test for these positions as applicants are evaluated based on education and experience. Therefore, it is critical that the application show detailed information relative to the type of work you have performed in the field and any education which provides partial qualification for each position.

At the time a vacancy exists, the bureau requests an employment register from the Department of Civil Service and forwards a letter of interest to eligible candidates.

To receive an application, please contact the Department of Civil Service at (517) 373-3030.

Applications Being Accepted for Elevator Inspectors

by Robert Schumacher

As stated above, Bureau of Construction Codes is currently accepting applications for persons interested in becoming Elevator Inspectors for the state of Michigan.

To become an elevator inspector for the state of Michigan, you must have 3 years experience in elevator construction and be certified competent by the Elevator Safety Board. Applicants for certification must pass a two-part examination, consisting of a written portion with multiple-choice questions and an oral portion. A score of 70% is required to pass. The exam is given at the regularly scheduled Elevator Safety Board meetings.

The current starting salary for these positions is \$39,630.24 and includes a full range of benefits.

To receive an application for certification or for more information, please contact the Elevator Safety Division at (517) 241-9337.

BCC Bulletin Page 2

Director's Column, continued...

upon language in the IBC. With the adoption of the 2000 edition of the IBC, the transformation of the State Code to the ICC series will be complete.

Our rules development schedule includes the adoption of the 2000 editions of the International Plumbing Code and the International Mechanical Codes in 2000. The 1999 electrical code rules are currently being promulgated. It is anticipated the code will be adopted later this year.

Questions regarding the schedule may be made to the Bureau at (517) 241-9302 or by writing to the Bureau. A notice of public hearing will be provided through this newsletter.

Holiday Closings

State offices will be closed in observance of the following holidays:

Sept. 6, 1999--Labor Day Nov. 11, 1999--Veteran's Day

CONSTRUCTION BULLETIN

MICHIGAN DEPARTMENT OF CONSUMER & INDUSTRY SERVICES

The BULLETIN is a quarterly publication of the Bureau of Construction Codes within the Michigan Department of Consumer & Industry Services. The BULLETIN is published for the information of the 46,000 plumbers, electricians, mechanical contractors, boiler and elevator licensees, plan reviewers, building officials, and inspector registrants throughout the state.

Editor-in-Chief: Henry L. Green
Editor: Kathy Stump

Bureau of Construction Codes P.O. Box 30254 Lansing, MI 48909

(517) 241-9313 Fax (517) 241-9308

Electrical Code Update Classes by Thomas Kriegish

By now you should have received an updated list of approved classes for the 1996 Electrical Code. The following licensees require the completion certificate for renewal: journeyman electrician, master electrician, fire alarm specialty technician, and sign specialist. If you haven't already completed a course on the 1996 code, please contact a course provider and get signed up for a class.

Many licensees have asked why the code class requirement is so far behind the publication of the code, by the National Fire Protection Association. Recent efforts have resulted in moving the 1999 code toward quicker adoption and hopefully this will move us toward a more current electrical industry in Michigan. We will keep all licensed persons informed of future code class requirements, by use of this newsletter and individual mailings.

Code course providers may submit their 1999 course materials for approval beginning September 1999.

NOTE: Individuals who pass the journeyman examination this year on the 1996 code will not be required to take a code update course if they were in an apprenticeship classroom program and they can provide documentation from their instructor that code study was part of that program.

Mechanical Product Approval

by Tennison B. Barry

From time to time I am asked if particular equipment or products are approved to be installed or used in the State. This is an attempt to explain who can approve a product and what those approvals mean to you as inspectors, contractors and manufacturers.

First and foremost it should be understood that the mechanical code is not intended to inhibit innovative advances in technology. As things change at a very fast pace, the fact that a material, product, or method is not addressed in the code is not an indication that such material, product, or method is intended to be prohibited.

For example, as a local inspector you have the ability to approve products. If the manufacturer can provide you with sufficient evidence of compliance with the specific provision of the code you can accept the product as being equivalent to that of one required by the code. Your approval only applies to that installation and does not allow the product to be used in the same manner without your approval again. However, if the same product is presented to and approved by the State Construction Code Commission it can be installed anywhere throughout the state without further review.

You ask, why would a manufacturer go to a local municipality instead of the State for approval. By getting state approval the manufacturer could in fact install the product anywhere in the state. However, when a product is evaluated by the state we have to take into consideration that this product can be installed all over the state without exception. Therefore, we look at these products very carefully to insure code compliance.

As an inspector this means that installations can be made that may not meet the letter of the code. However, it must meet the intent of the code. The inspector has the ability to accept the installation under Section 105.2 of the 1996 International Mechanical Code, or Section 107.4 of the 1993 BOCA Mechanical Code.

As an inspector you should not be afraid to accept these products but you should know why you are accepting them and have the reasons thoroughly documented. If you have any questions you may contact me at (517) 241-9325.

BCC Bulletin Page 3

Expansion Tanks by Bryan Jorgensen

The Boiler Act of 1965, P.A. 290 and the ASME Code require expansion tanks to be installed on hot water systems. These expansion tanks must be properly sized so that the tank can handle the expansion of water that results with the addition of heat to the system.

A non-code expansion tank must be rated for 30 psig and tested to 75 psig. These non-code tanks may be used on those hot water heating boilers, and hot water supply boilers where the relief valve is set at no more than 30 psig.

For those hot water heating boilers and hot water supply boilers where the relief valve is set higher than 30 psig the expansion tank must be constructed to the ASME Code, Section VIII, Division 1. Hot water supply boilers do not require an expansion tank be installed, but if one is used it must be a code tank.

In addition, whenever an expansion tank is used it must have a stop valve located between the boiler and the expansion tank. This is to facilitate servicing and draining the tank.

Any questions about the code requirements concerning expansion tanks may be directed to the Boiler Division at (517) 241-9334.

Electrical Exam Date Change

by Hugh Williams

Attention electrical exam applicants. The dates for the December 1999 electrical licensing examinations in Lansing have changed. The new dates are Tuesday, December 7, 1999, and Wednesday, December 8, 1999. The application and examination fee must be received in this office by November 4, 1999, 20 business days prior to the scheduled examination date. Please allow sufficient mailing time. examinations will be held at the Royal Scot Banquet Center at 4722 W. Grand River, Lansing, Michigan. Approved applicants will receive an admission card and map approximately two weeks prior to the exam. Additional information may be obtained from the Electrical Division at (517) 241-9320.

Scheduled Board Meetings

<u>MEETING</u>	<u>DATE</u>	TIME	<u>LOCATION</u>
Construction Code Commission	Sept. 1	9:30 a.m.	Okemos-Conf. Room 3
Barrier Free Design Board	Sept. 10	9:30 a.m.	Okemos-Conf. Room 1
Board of Boiler Rules	Sept. 14	9:30 a.m.	Okemos-Conf. Room 1
Elevator Safety Board	Sept. 24	9:30 a.m.	Okemos-Conf. Room 3
Electrical Administrative Board	Oct. 15	9:30 a.m.	Okemos-Conf. Room 1
Board of Mechanical Rules	Oct. 20	9:00 a.m.	Okemos-Conf. Room 3
State Plumbing Board Construction Code Commission Barrier Free Design Board	Oct. 27	10:00 a.m.	Okemos-Conf. Room 2
	Nov. 3	9:30 a.m.	Okemos-Conf. Room 3
	Nov. 5	9:30 a.m.	Okemos-Conf. Room 1
Elevator Safety Board	Nov. 19	9:30 a.m.	Okemos-Conf. Room 3

Okemos = 2501 Woodlake Circle, 2nd floor, Okemos, MI

License Exam Schedule

EXAM	<u>DATE</u>	LOCATION	<u>DEADLINE</u>
Elevator Contractor &			
Certificate-of-Competency Exam	Sept. 24	Okemos	Sept. 3
Electrical Exam	Sept. 30	Escanaba	Sept. 1
Elevator Journeyperson Exam	Oct. 13	Okemos	Sept. 24
Elevator Contractor &			
Certificate-of-Competency Exam	Nov. 19	Okemos	Oct. 29
Plumbing Exam	Dec. 1	East Lansing	Nov. 12
Boiler Installer/Repairer Exam	Dec. 1/2	Okemos	Nov. 1
Boiler National Board Exam	Dec. 1/2	Okemos	Nov. 1
Electrical Exam	Dec. 7/8	Lansing	Nov. 4
Mechanical Contractor Exam	Dec. 8/9	Detroit	Nov. 8

Dates and locations are subject to change.

Plumbing Code Change Proposals for the 2000 International Plumbing Code

by Robert G. Konyndyk

The Plumbing Division is requesting your comments and code change proposal for the next edition of the International Plumbing Code.

The proposal will be considered for technical amendments to the International Plumbing Code and could be incorporated in Part 7 state code amendments for the next rules cycle. Suggestions must consider actions taken by the International Code Council and published in the 1998, 1999, and 2000 Accumulative Supplements.

The division remains committed to utilizing a nationally recognized code with as few amendments as possible to increase enforcement uniformity and reduce construction costs.

Please forward suggestions to Robert Konyndyk, Chief of the Plumbing Division by September 30, 1999. Comments will be analyzed and reviewed by the code development committee.

BCC Bulletin Page 4

Foundation Anchorage and Approved Alternative Systems by Larry Lehman

Section 2305.17 of the 1996 BOCA National Building Code outlines the building code requirements for anchorage of wall sill plates to the foundation. While there have been some changes in the code requirements for anchor bolt installation, these requirements are very clear. Anchor bolts shall be of a minimum diameter of ½ inch. The bolts shall be embedded in concrete or grouted masonry to a depth of not less than 7 inches. There shall be a minimum of two (2) anchor bolts per section of plate and anchor bolts shall be placed 12" from the end of each section of plate, with intermediate bolts spaced a maximum of 6 feet on center for one and two story buildings and not more than 4 feet on center for buildings over 2 stories in height.

Additionally, the exception for Section 2305.17 allows maximum intermediate bolt spacing of 8 feet on center for detached one and two family dwellings in Michigan in accordance with the seismic map areas identified in Section 1610.1.

Section 2305.17 also provides for the installation of other approved anchoring methods, commonly referred to as foundation straps, hold down anchors, etc. It is with these installations that mistakes are most commonly made. In accordance with Sections 106.4 and 2305.17 of the code, alternative anchoring systems shall be approved by the code official when the proposed design is satisfactory and complies with the intent of the code provisions. Data is necessary to determine code compliance. The data should be in the form of test reports or engineering analyses. Approval is given when the product has been installed in accordance with the manufacturer's instructions and installed in accordance with an approval and all conditions and limitations with that approval.

A common installation problem with alternative anchoring systems is their spacing. While the building code allows 6 feet and 8 feet intermediate spacing for 1/2" anchor bolts,

this same spacing requirement for alternative systems is normally different. Most of these systems require 3 feet to 4 feet spacing. It is absolutely necessary that the code official have the manufacturer's instructions and an approval report to insure code compliance.

Registration Millennium Update

by Scott D. Fisher

By the time this newsletter is received, all registered inspectors should have received a credit statement. Although another credit statement will be provided just prior to the end of the 1996-1999 cycle, the July credit statements should be reviewed for accuracy to avoid last minute delays in processing your registration renewal. If there are discrepancies between the credit statement and your records, it is requested that you contact the program provider or instructor to determine if program rosters have been submitted. If rosters have not been submitted, you should encourage they be submitted immediately. If you find that rosters have been submitted and a discrepancy remains, the Bureau's Office of Local Government and Consumer Services should be notified in writing. A copy of any documentation that would clarify the discrepancy should be attached to your letter.

In addition, notification was recently sent to all program instructors and providers, as a reminder that they are required to renew their instructor registration, and submit appropriate information relating to programs they wish to have approved for the 1999-2002 code cycle. For convenience, instructor and program applications were included with the notification. If you are registered as an instructor and did not receive the notification and applications, please contact our office at (517) 241-9347.

Printed under the authority of Public Act 230 of 1972, as amended. Paid with State Construction Code Funds. Total printed: 47,000 Printing cost: \$ X,XXX.00 Per copy cost: \$ 0.XXX

LANSING MI PERMITNO. 1200

PRESORTED FIRST CLASS MAIL U.S. POSTAGE **P A I D** Michigan Department of Consumer & Industry Services Bureau of Construction Codes P.O. Box 30254 Lansing, Michigan 48909